



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Reinout G. Oussoren )

Jack T. Clements )

Serial No. 09/430,063 )

Filed: 10/29/99 )

UNITARY FILTER CARTRIDGE )

Examiner: Minh-Chau Pham

Art Unit: 1724

Attorney Docket No. BHAG.68900

DECLARATION UNDER 37 CFR 1.131

RECEIVED  
OCT 28 2002  
TC 1700

I, Jack T. Clements, declare that:

1. I am a citizen of the United States of America, I am one of the joint inventors of the subject patent application, and I reside at 113 NE Cove Drive, Lee's Summit, Missouri 64064.

2. For the purposes of completeness and clarity, this declaration repeats portions of my declaration dated 4/11/02 in the subject application which declaration is reaffirmed in its entirety.

3. The subject matter set forth in each of the Claims 1-11 of the application was invented at least before the filing date of September 4, 1998 of the Brunner U.S. Patent No. 5,964,909 which issued October 12, 1999.

4. I have a BS degree in science and have been employed as a design and chief engineer of air pollution control filters and equipment for approximately 30 years.

5. I have reviewed the Examiner's comments in the Office Action dated June 18, 2002 and again reviewed Brunner U.S. Patent No. 5,964,909.

6. Attached as Exhibit A is a sketch I personally prepared and dated on May 22, 1995 which was faxed to a prospective customer of SF Air Filtration, Inc. which was a wholly owned

subsidiary of my employer BHA Group, Inc. (["BHA"]), assignee of U.S. Patent No. 5,632,791. The sketch illustrates a tubular metal insert, commonly known in the air pollution control industry as a venturi, installed in the mouth of the filter cartridge to effect a friction fit seal between the tube sheet opening and the resiliently deformable, molded top of the filter cartridge. Also attached as Exhibits B, C & D are production drawings of BHA for various sized venturi inserts for filter cartridges and which respectively bear the dates 3-6-96, 7-24-96 and 9-19-96. Each of these drawings was prepared under my supervision on or about the dates indicated in 1996. Exhibits B, C & D show dimensional details of venturis for installation in the mouth of a filter cartridge of a particular size to effect a friction fit seal between the tube sheet opening and the resiliently deformable, molded top of the filter cartridge. For example, Exhibit B illustrates the venturi to insert in a top access filter cartridge to be installed in a tube sheet having a circular opening of 6.25 inches. Exhibits A-D clearly demonstrate that the subject matter set forth in each of the Claims 1-11 of the application was invented at least before the filing date of September 4, 1998 of the Brunner U.S. Patent No. 5,964,909.

7. In considering Exhibits A-D and finding that the exhibits combined with my declaration did not overcome Brunner as a prior art reference, the Examiner states in the last Office Action dated June 18, 2002 as follows:

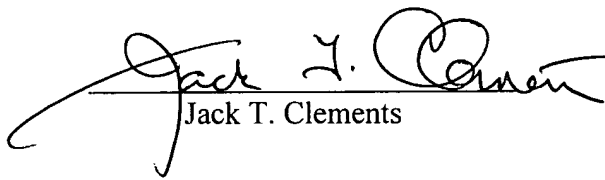
The Examiner thoroughly examines the sketch (exhibit A) as well as all the submitted exhibits B, C & D, but find none of these exhibits discloses the claimed feature 'a tubular fitting including a flange extending above the tube sheet having a tube sheet mouth insert, a contoured transition, a lower cylindrical collar extending beneath the tube sheet all integrally formed of flexible, resiliently deformable material, and a tubular expander with an insertable band including an outer diameter substantially equal to or less than the inner diameter of the flange of the fitting, and the band configured to engage interiorly the frusto-conical portion of the contoured transition of the fitting proximate the circular opening through the tube sheet to

bias portions of the resiliently deformable fitting to affect sealing engagement with the cylindrical mouth surface of the tube sheet'.

8. I disagree with the Examiner's foregoing understanding of the exhibits and have attempted, with the use of color notations on the attached Exhibit E (which is a slightly enlarged copy of the sketched portion of Exhibit A), to illustrate that all of the above features referenced by the Examiner are shown in Exhibit A. First with reference to Exhibit A, the "tubular fitting" is shown in cross section in all black and "integrally formed of flexible, resiliently deformable material" – namely, molded polyurethane. Even though the molded top (i.e., the "tubular fitting") is integrally formed, in Exhibit E I've outlined with colors the various cross sectional regions of the structure to point out the features referenced by the Examiner. The "flange extending above the tube sheet" is outlined in the color red; the "tube sheet mouth insert" is outlined in the color green; the "contoured transition" is outlined in the color blue; and the "lower cylindrical collar extending beneath the tube sheet" is outlined in the color yellow. The cross sectional portion of the "tubular expander" is outlined in the color magenta. That portion of the magenta outlined tubular expander which represents the "band" is filled in with the color turquoise and it can be seen in the sketch that the "band" has "an outer diameter substantially equal to or less than the inner diameter of the flange of the fitting" and is "configured to engage interiorly the frusto-conical portion of the contoured transition of the fitting proximate the circular opening". Moreover, it should be noted that the original sketch dated May 22, 1995 (Exhibit A) references the metal venturi's friction fit into the polyurethane top. Therefore, all of the features referenced in the Examiner's comments are clearly contained in the sketch of Exhibit A which long predates the Brunner patent.

9. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these

statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
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Jack T. Clements

10/15/02  
Date